Course 5- Energy and Water use efficiency

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| A. Name of the Institute | The Energy and Resources Institute (TERI) |
| B. Name/Title of the Course | Energy and Water use efficiency |
| C. Course Dates with Duration in Weeks  *[note: dates may be fixed keeping in mind festivals, holidays, weather conditions, availability of accommodations, etc. No request for change in dates, once approved/ circulated will be entertained]* | **02-01-2017 - 20-01-2017, 3 weeks** |
| D. Eligibility Criteria for Participants  1. Educational Qualifications  2. Work Experience required, if any  3. Age Limit  *[note: ITEC norms is 25-45 years]*  4. Target Group *[Level of participants and target ministries/departments etc. may be indicated]* | Bachelors ; preferably with technical background  Minimum 2 years  3) 25 – 45 years  4) Both Government and Non-Government participants |
| E. Aims & Objectives of the Course | In recognition to the aspect of scarcity of resources, this course will provide an in-depth understanding on various aspects of energy and water. The course will specifically focus on increasing the efficiency of using energy and water in industrial and other sectors. |
| F. Course Contents / Syllabus *[please attach course details / profile in Word Format for uploading on ITEC website]* | **Energy**  Energy conservation: Initiatives by Government of India including National Mission on Enhanced Energy Efficiency  Basics of Energy and various forms of Energy  Energy Audit: Types and Methodology  Fuel and combustion concepts  Energy efficiency options in thermal utilities like Boiler/furnace/steam systems etc.  Visits to sites (buildings, industries) to showcase energy and water efficiency initiatives  Demand side management measures to reduce electricity consumption  Regulatory and policy options to promote energy efficiency  Energy efficiency options in electrical systems motors/transformers/fans & blowers/lighting etc.  Energy conservation options in commercial and residential buildings including passive building design  Case studies of energy audits undertaken in various installations in India and other developing countries  Familiarisation with main energy  **Water**  State of water resources: Major Challenges-National and International perspectives  State of water use in industrial, domestic and agriculture sector in India  Water Audit as a tool to enhance water use efficiency  TERI’s experience on water audits in Industries: case studies  Water demand management: Concept and case studies of urban local bodies  Water conservation: Scope & Opportunities  TERI’s experience on water conservation: Groundwater recharge; wastewater recycling; rooftop rainwater harvesting etc.  Government’s relevant policies and program on water  Familiarisation with water audit instrumentation  Visit to water conservation initiatives at TERI RETREAT at Gual Pahari. |
| G. Mode of evaluation of performance of the participants | Participation and interaction during the course  A short report or presentation from the participants summarizing the learning from the course |